

What is claimed is:

Sub

1. A compressor, comprising:

a compression chamber for compressing working fluid within an inside thereof;

5 a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

10 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion; and

15 a means being provided on a member formed in one body with said valve seat portion, for positioning said valve to said valve seat portion.

2. A compressor, comprising:

20 a compression chamber for compressing working fluid within an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

25 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

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a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion;

a means being provided on a member formed in one body with said valve seat portion, for positioning said valve to said valve seat portion; and

a flat surface portion being provided at an end portion of said valve on the side of the compression chamber.

3. A compressor, comprising:

a compression chamber for compressing working fluid within an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion;

a means being provided on a member formed in one body with said valve seat portion, for positioning said valve to said valve seat portion; and

a cylindrical portion, being formed by connecting an inner side surface of said discharge port with said valve seat portion, continuously.

4. A compressor, comprising:

a compression chamber for compressing working fluid within an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

5 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion;

10 a bore being provided on a member formed in one body with said valve seat portion, and connecting to said valve seat portion; and

15 a holding means being inserted into an inside of said bore to be positioned, for holding said valve opposing to said valve seat.

5. A compressor, comprising:

a compression chamber for compressing working fluid within an inside thereof;

20 a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

25 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion; and

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a bore being provided on a member formed in one body with said valve seat portion, and connecting to said valve seat portion;

a holding means being inserted into an inside of said bore to be positioned, for holding said valve opposing to said valve seat; and

a flat surface portion being provided at an end portion of said valve on the side of the compression chamber.

6. A compressor, comprising:

10 a compression chamber for compressing working fluid within an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

15 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

20 a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion; and

a bore being provided on a member formed in one body with said valve seat portion, and connecting to said valve seat portion;

25 a holding means being inserted into an inside of said bore to be positioned, for holding said valve opposing to said valve seat portion; and

an opening provided on said holding means.

7. A compressor, comprising:

a compression chamber for compressing working fluid within

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an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

a valve means for opening or closing said discharge port;

5 a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the compression chamber;

10 a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion; and

a bore being provided on a member formed in one body with said valve seat portion, and connecting to said valve seat portion;

15 a holding means being inserted into an inside of said bore to be positioned, for holding said valve opposing to said valve seat portion; and

a cylindrical portion, being formed by connecting an inner side surface of said discharge port with said valve seat portion, continuously.

20 8. A compressor, comprising:

a compression chamber for compressing working fluid within an inside thereof;

a discharge port, through which said working fluid flows out from said compression chamber;

25 a valve means for opening or closing said discharge port;

a valve seat portion being provided in said discharge port and having a shape of curved surfaces, so that a cross-section area of said discharge port comes to be large from a side of the

compression chamber;

a valve having a projection portion having a curved surface in contact with said curved surface of the valve seat portion; and

5 a bore being provided on a member formed in one body with said valve seat portion, and connecting to said valve seat portion;

a holding means being inserted into an inside of said bore to be positioned, for holding said valve opposing to said valve seat portion; and

10 a passage being provided between said holding member and an inner side surface of said bore for conducting the working fluid therethrough.

9. A compressor, as defined in any one of the claims 1 to 8, further comprising:

15 a biasing means for supporting said valve, so that said valve is freely contact on or separate from a sheet surface of said valve seat portion.

10. A compressor, as defined in any one of the claims 1 to 8, further comprising:

20 a biasing means for supporting said valve, so that said valve is freely contact on or separate from a sheet surface of said valve seat portion, and having a coiled spring being engaged with said valve and formed nearly into a conical shape.

25 11. A compressor, as defined in any one of the claims 1 to 8, further comprising:

a biasing means for supporting said valve, so that said valve is freely contact on or separate from a sheet surface of said valve seat portion, and having a leaf spring being formed with slits and for biasing said valve with a central portion thereof.

12. A compressor, as defined in any one of the claims 1 to 8, further comprising:

an opening formed in said holding means; and

a biasing means for supporting said valve, so that said
5 valve is freely contact on or separate from a sheet surface of
said valve seat portion, and having a leaf spring being formed
with slits and for biasing said valve with a central portion thereof.

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